Candidate Information

Position:	Senior or Principal Engineer
School/Department:	School of Electronics, Electrical Engineering and Computer Science
Reference:	24/111939
Closing Date:	Monday 10 June 2024
Salary:	£39,456 - £57, 273 per annum
Anticipated Interview Date:	Week commencing 1st July
Duration:	Permanent

JOB PURPOSE:

To undertake collaborative development projects with industrial partners exploiting research and innovation from the Centre for Secure Information Technologies (CSIT), with particular emphasis on the use of artificial intelligence (AI) for cyber security. At Principal Engineer level you will be expected to lead on these projects.

MAJOR DUTIES:

1. To contribute to the commercialisation and technology transfer of CSIT's research outputs by contributing to a number of on-going research programmes in collaboration with research-intensive SME's, international corporations and research institutes.
2. Undertaking significant software development projects and managing research projects and deliverables focused on the use of artificial intelligence for cyber security.
3. Design and development of software components incorporating cutting edge AI and cyber security technologies.
4. Design and development of proof-of-concept demonstrators that incorporate newly developed capabilities emerging from CSIT research groups.
5. To assist with the raising of substantial funding from industry and major government sources, nationally and internationally.
6. Produce high-quality technical reports and deliverables to enable commercialisation or assist in generating funding opportunities to support further programme activity.
7. Help develop the international reputation of CSIT through presentations, attendance at tradeshows and visiting major companies and research centres worldwide.
8. Provide mentoring and training to staff/students as appropriate.
9. Carry out routine administrative tasks to ensure project goals are completed on time and within budget.
10. Undertake any other duties that may reasonably be requested by management.
11. At Principal Engineer level, in addition to the duties listed above, you will be expected to take accountability and provide leadership, in terms of project development, management and delivery, and also with regard to line managing and developing a team.

ESSENTIAL CRITERIA:

1. 2:1 Honours Degree, or equivalent, in Electrical/Electronic Engineering, Computer Science or related discipline.
   Or
   Minimum HND in a related discipline with extensive recent and relevant industrial experience
2. Evidence of: Industrial product development experience involving software design and development.
3. Software development skills in languages such as C, C++ / Java / Python / R.Use of code configuration management toolsets.
4. Experience of Artificial Intelligence and Machine Learning methodologies and tools
5. Proven understanding of cyber security.High-quality outputs such as demonstrators, prototypes, technical reports, major component design specifications and project deliverables which have successfully passed formal quality review procedures.

6. For Principal Engineer, you must be able to demonstrate extensive experience of the above. Furthermore, you must demonstrate:
   • a strong track record of designing and delivering complex R&D projects.
   • significant experience of leading, managing and mentoring a team.
7. Ability to communicate complex information clearly in both written and spoken English to a range of stakeholders.
8. Evidence of strong presentation skills and ability to prepare clear and concise presentation materials.
9. Evidence of effective team working skills in a multidisciplinary, cross functional setting.
10. For Principal Engineer, you will need to show evidence of being a technical leader.
11. Willingness to visit collaborative partners and to attend meetings and conferences nationally and internationally as requested.

DESIRABLE CRITERIA:

1. MEng, MSc or Ph.D. in a relevant area.
2. Cloud computing professional certifications (AWS/Azure Cloud Architect, etc.)
3. Cyber security professional certifications (CISSP, CEH etc.)
4. Evidence of:
   • Delivery of cloud-based software solutions.
   • Experience of use of continuous integration toolsets.
   • Systems Engineering experience.
   • Experience of Agile development processes.